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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,322	09/18/2006	Akinari Sugiyama	060706	7552
23850 7590 03/24/2009 KRATZ, QUINTOS & HANSON, LLP			EXAMINER	
1420 K Street, N.W.			NWAONICHA, CHUKWUMA O	
Suite 400 WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
	,		1621	
			MAIL DATE	DELIVERY MODE
			03/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

#### Application No. Applicant(s) 10/593 322 SUGIYAMA ET AL. Office Action Summary Examiner Art Unit CHUKWUMA O. NWAONICHA 1621 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 05 December 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 5 Notice of Informal Patent Application 3) Information Disclosure Statement(s) (PTO/SE/08)

Paper No(s)/Mail Date \_

6) Other:

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#### DETAILED ACTION

#### Current Status

- 1. This action is responsive to Applicants' amendment of 5 December 2008.
- 2. Receipt and entry of Applicants' amendment is acknowledged.
- Claims 1-20 are pending.
- 4. The 103 rejection of claims 1-20 for the reasons set forth in the previous Office

Action of 09/09/2008 is withdrawn because the prior art reference cited does not teach all the claims limitation.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- Resolving the level of ordinary skill in the pertinent art.
- Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drivon et al., {US 5,057,633} or Drivon et al., {US 4,912,269} in view of Storzer et al.,

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(Two fluorinated, fluorosulfonyl-containing hypochlorites and their alkali-metal precursors. Inorganic Chemistry (1991), 30(25), 4821-4826).

Applicants claim a method for producing a fluorine-containing halide, comprising reacting a fluorine-containing sulfonyl halide with a metal halide in the presence or absence of a solvent; wherein all the variables are as defined in the claims.

### Determination of the scope and content of the prior art (M.P.E.P. §2141.01)

Drivon et al.(1) and Drivon et al.(2) teach a method for producing the fluorinecontaining halide in excellent yield. The process step is shown by the equation below. See column 1 of the prior art references and the claims.

$$R_F - SO_2Cl + HBr \xrightarrow{cata/\Delta} R_FBr + SO_2 + HCl$$

# Ascertainment of the difference between the prior art and the claims (M.P.E.P., \$2141.02)

Drivon et al.(1) and Drivon et al.(2) method for preparing a method for producing a fluorine-containing halide differs from the instantly claimed process in that Applicants claim a process comprising metal Br or I while Drivon et al.(1) and Drivon et al.(2) teach a process comprising HBr salt of amine as shown below. See column 2 of the prior art references.

$$Br^{\Theta} R^{I} - X \stackrel{\Theta}{\underset{R}{\overset{R}{\smile}}} R$$

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However, the secondary reference of Storzer et al. teaches a method for preparing a method for producing a fluorine-containing halide in the presence of a metal salt as shown below.

# Finding of prima facie obviousness-rational and motivation (M.P.E.P., §2142-2143)

The instantly claimed method for preparing a method for producing a fluorinecontaining halide is obvious to one of ordinary skill in view of the teachings of Drivon et al.(1), Drivon et al.(2) and Storzer et al.

One of ordinary skill in the art would have a reasonable expectation of success in producing a fluorine-containing halide by evaluating any commercially available metal halides with fluorine-containing sulfonyl halide by following the teaching of Drivon et al.(1), Drivon et al.(2) and Storzer et al. to prepare a fluorine-containing halide as desired. Said person would have been motivated to practice the teaching of the references cited because the references demonstrate that fluorine-containing halide is useful in industrial applications. The Examiner notes that replacing one reagent with another reagent or variation of process conditions in a chemical reaction is a well-known chemical practice to optimize the process efficiency of the system and does not

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constitute a patentable distinction or patentable modification **absent** a showing of criticality. *In re Aller*, 220 F. 2d 454, 105 U. S. P. Q. 233 (C. C. P. A. 1955).

Moreover, all the claimed elements were known in the prior art references cited and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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/Chukwuma O. Nwaonicha/ Examiner, Art Unit 1621

/Sikarl A. Witherspoon/ Primary Examiner, Art Unit 1621

(for)

Daniel Sullivan Supervisory Patent Examiner, Technology Center 1600